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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/760,604  | 01/20/2004  | Earl O. Bergersen    | BER-P-03-060        | 9955             |
| 29013   | 7590        | 09/13/2005           | EXAMINER            |                  |
| PATENTS+TMS, P.C.<br>2849 W. ARMITAGE AVE.<br>CHICAGO, IL 60647 |             |                      | MANAHAN, TODD E     |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 3732                |                  |

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SJP

|                              |                             |                    |
|------------------------------|-----------------------------|--------------------|
| <b>Office Action Summary</b> | Application No.             | Applicant(s)       |
|                              | 10/760,604                  | BERGERSEN, EARL O. |
|                              | Examiner<br>Todd E. Manahan | Art Unit<br>3732   |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 01 June 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-82 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-82 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 20 January 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION*****Election/Restrictions***

The Election restriction requirement mailed 28 April 2005 is hereby withdrawn.

All claims 1-82 will be examined.

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the wedges formed within the appliances must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 9.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 115, 117, 119, 121. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Specification*

The abstract of the disclosure is objected to because a concise statement of the technical disclosure of the patent, but rather refers to purported merits or speculative applications of the invention. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification must adequately disclose the embodiment with a solvent positioned between the reline material and the interior surface; the appliance being thicker at the second end than the first; and the wedges formed within the

first and second appliances, or the subject matter cancelled from the claims. No new matter may be added.

*Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-53, 55, and 57-70 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not recite what a “reline material” is or what properties it possesses or give examples of materials which could be used as a reline material. As such one skilled in the art would be unable to make and use the invention as they would not know what to use as such “reline material”.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5-9, 12, 13, 54-56, 71-82, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Bergersen (United States Patent No. 3,950,851).

Bergersen discloses a dental appliance which is placed in mouth of a user wherein the user has teeth, the dental appliance comprising: a generally U-shaped base having

length defined between a first end and a second end and having an occlusal surface wherein occlusal surface contacts the teeth when the base placed within the mouth wherein the base has an interior surface which substantially surrounds a surface of at least one of the teeth; and a reline material in contact with the interior surface wherein the reline material causes adhesion the base the teeth (see col. 2, lines 7-37). Regarding claim 2, see col. 2, lines 41-55.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (United States Patent No. 3,950,851).

It would have been obvious to one skilled in the art to provide the device of Bergersen with a roughened interior surface in order to increase adhesion of the reline material as it is well known that a rough surface provides better adhesion by increasing the surface area.

Claims 1-6, 8, 9, 12-15, 18-21, 23, 24, 27-29, 31-36, 40, 41, 43-48, 50, 52, 54-59, 61, 64-68, 70-72, 74-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (United States Patent No. 4,898,535) in view of Bergersen (United States Patent No. 3,950,851).

Bergersen '535 discloses the invention essentially as claimed except for the reline material. Bergersen '851 discloses that it is known in the art to provide a u-shaped orthodontic appliance with a material lining the tooth cavities, a reline material, to firmly engage the tooth to hold it in a specific position (see col. 4, lines 11-37). It would have been obvious to one skilled in the art to provide the appliance of Bergersen '535 with a reline material as taught by Bergersen '851 in order to firmly engage the tooth to hold it in a specific position.

Claims 7, 10, 16, 17, 22, 30, 37, 39, 42, 49, 51, 53, 62, 63, 69, 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (United States Patent No. 4,898,535) in view of Bergersen (United States Patent No. 3,950,851) as applied to claims 1, 14, 27, 40, 57, 64, 71 and further in view of Huge (United States Patent No. 4,448,735).

Huge discloses it is known in the art to make an orthodontic appliance with a first material having a lesser rigidity than a second material in order to anchor the appliance in place with the stiffer portions and move teeth with the less stiff portion (see col. 2, lines 5-31). It would have been obvious to one of ordinary skill in the art to form the appliance of Bergersen '535 as modified by Bergersen '851 with a first material having a lesser rigidity than a second material in order to anchor the appliance in place with the stiffer portions and move teeth with the less stiff portion.

Claims 11, 26, 38, 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (United States Patent No. 4,898,535) in view of Bergersen (United States Patent No. 3,950,851) as applied to claims 1, 14, 27, 40, 57 and further in view of Bergersen (United States Patent No. 5,876,199).

Bergersen '199 discloses providing an orthodontic appliance with lingual tabs 46 in order to assist in keeping the mandible advancing maximally at all times and moving forward (see col. 6, lines 37-46). It would have been obvious to one of ordinary skill in the art to form the appliance of Bergersen '535 as modified by Bergersen '851 with lingual tabs in view of Bergersen '199 in order to assist in keeping the mandible advancing maximally at all times and moving forward.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (United States Patent No. 4,898,535) in view of Bergersen (United States Patent No. 3,950,851) as applied to claim 14 and further in view of Truax (United States Patent No. 5,683,244).

Truax discloses an orthodontic appliance having wedges formed on the upper and lower appliances in order to position the mandible to correct a class II malocclusion (see col. 2, lines 18-25). It would have been obvious to one of ordinary skill in the art to form the appliance of Bergersen '535 as modified by Bergersen '851 with wedges formed on the upper and lower appliances in view of Truax in order to position the mandible to correct a class II malocclusion.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd E. Manahan whose telephone number is 571 272-4713. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571 273-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T.E. Manahan  
8 September 2005

Todd E. Manahan  
Primary Examiner  
Art Unit 3732

